

ABSTRACT

A method for processing data sets is disclosed. In one embodiment, the method comprises; (a) defining at least two primary region constraints in the data sets by creating a corresponding constraint data set, (b) combining at least two primary region constraints using gated-logic expressions to create derived regions, (c) creating mapping functions from the gated-logic expressions of the derived regions, and (d) displaying desired derived regions through manipulation of the mapping functions. This method is preferably computer implemented and permits processing of multiple constraints in large data sets (such as, three-dimensional seismic or discontinuity data).